# Position Details

## Research Scientist/Engineer- CSOF5

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| The following information is for applicants |
| Advertised Job Title | Research Scientist/Engineer - Energy Materials |
| Job Reference | 97355 |
| Tenure | Indefinite Full-time |
| Salary Range | AU$114,219 - AU$123,605 per annum (pro-rata for part-time)plus 15.4% superannuation |
| Location(s) | Melbourne (Clayton), Victoria |
| Relocation Assistance | Will be provided to the successful candidate if required |
| Applications are open to | * Australian/New Zealand Citizens and Australian Permanent Residents
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| Position reports to the | Team Leader, Solar PV Durability |
| Client Focus – Internal | 70% |
| Client Focus – External | 30% |
| Number of Direct Reports | 0 |
| Enquire about this job | Contact Benjamin Duck via email at Benjamin.Duck@csiro.au or phone +61 2 4960 6011 |
| How to apply | Apply online at <https://jobs.csiro.au/> Internal applicants please apply via **Jobs Central**If you experience difficulties when applying, please email careers.online@csiro.au or call 1300 984 220. |

**Acknowledgement of Country**

CSIRO acknowledges the Traditional Owners of the land, sea and waters, of the areas that we live and work on across Australia. We acknowledge their continuing connection to their culture and pay our respects to their Elders past and present. View our [vision towards reconciliation](https://www.csiro.au/en/about/Indigenous-engagement/Reconciliation-Action-Plan).

**Child Safety**

CSIRO is committed to the safety and wellbeing of all children and young people involved in our activities and programs. View our [Child Safe Policy](https://www.csiro.au/en/about/policies/child-safe-policy).

### Role Overview

The role of Research Scientist/Engineer staff is to conduct innovative research leading to scientific achievements that are aligned with CSIRO’s strategies. The Research Scientist/Engineer may be engaged in scientific activity ranging from fundamental research to the investigation of specific industry or community problems. The Research Scientist/Engineer will have the opportunity to build and maintain networks, play a lead role in securing project funds, provide scientific leadership and pursue new ideas and approaches that create new concepts.

We are looking for a specialist in material science for energy applications to work in developing new technologies for solar energy generation, usage and storage.

As part of this team, within CSIRO’s Energy Research Unit, you will work within a multidisciplinary engineering & scientific team. You will be responsible for supporting existing project areas by providing your expertise in working with teams across multiple sites developing next generation solar cells, technologies for utility scale PV and industrial scale solar thermal to produce decarbonised electricity.

A strong focus area for the team is developing solutions that will support the realisation of ultra low cost solar (ULCS) for Australia. The team currently has active projects in a diverse range including deployment system, coatings, robotics, quality assurance, medium term storage, field modelling, site selection, metallisation and agrivoltaics.

As a materials domain expert you will also be provided the opportunity to identify and lead projects into a new research area supported by the resources and knowledge of Australia’s national science agency. The role will be based at our Clayton (VIC) site sits within the Australian Manufacturing and Materials Precinct. This location provides material science researchers with access to state of the art materials fabrication and characterisation facilities including the Melbourne centre for nanofabrication (MCN) and the Australian Synchrotron and CSIROs Advanced Characterisation Facility.

### Duties and Key Result Areas

* Under the supervision of more senior researchers, assist in the planning and preparation of research proposals and carry out research investigations, requiring originality, creativity and innovation.
* Select the most profitable line of attack upon a problem, prepare detailed design proposals and experimental protocols.
* Draw on professional expertise, knowledge of other disciplines and research experience to recognise opportunities for innovation and generate new theoretical perspectives by pursuing new ideas/approaches and networking with scientific colleagues across a range of disciplines.
* Participate in identification of further opportunities which arise from research and initiate new lines of research.
* Undertake activities focused on one or more elements of larger research projects.
* Apply discretion to decide and implement strategies appropriate to the successful completion of work.
* Liaise with clients to determine their needs and take personal responsibility for client satisfaction.
* Present results in a meaningful format, prepare reports for clients and/or write scientific papers for publication.
* Address problems promptly and in a constructive manner.
* Undertake experimental and/or observational research activities and supervise/train others to ensure experiments are established in accordance with research design.
* Provide supervision and coaching to students and technical staff.
* Communicate openly, effectively and respectfully with all staff, clients and suppliers in the interests of good business practice, collaboration and enhancement of CSIRO’s reputation.
* Work collaboratively as part of a multi-disciplinary, regionally dispersed research team to carry out tasks in support of CSIRO’s scientific objectives.
* Adhere to the spirit and practice of CSIRO’s Values, Code of Conduct, Health, Safety and Environment procedures and policy and diversity initiatives.
* Other duties as directed.

## **Selection Criteria**

#### Essential

*Under CSIRO policy only those who meet all essential criteria can be appointed.*

1. A PhD in a relevant material science or engineering discipline (e.g. Physics, Chemistry, etc) with at least 3 years post qualification experience.
2. Demonstrated ability to undertake original, creative and innovative research by generating and pursuing novel ideas and solutions to scientific research problems.
3. A demonstrated publication history of authorship on scientific papers in peer reviewed journals and/or reports, grant applications or inventorship on patent applications.
4. Good oral and written communication skills including the ability to communicate outcomes tailored to stakeholders from diverse audiences.
5. Proven ability to work both independently and collaboratively as part of a multi-disciplinary team, carrying out tasks safely and successfully in support of project goals.
6. Knowledge and experience in one or more of the following areas
	* 1. Surface chemistry
		2. Photovoltaics
		3. Photoactive materials
		4. Functional coatings
		5. Encapsulation material design and testing
		6. Electrochemistry

## **Desirable**

1. Experience mentoring or supervising research students and/or technical staff.
2. Previous experience developing patents or commercialising research findings
3. Experience commercially engaging with industry partners or clients on research initiatives.
4. Experience presenting at international conferences or industry seminars.
5. Leadership experience in small research teams or projects.
6. Experience in data science/data engineering.
7. Experience with high throughput science.

## **Required Competencies**

* **Teamwork and Collaboration:** Cooperates with others to achieve organisational objectives and may share team resources in order to do this. Collaborates with other teams as well as industry colleagues.
* **Influence and Communication:** Uses knowledge of other party's priorities and adapts presentations or discussions to appeal to the interests and level of the audience. Anticipates and prepares for others’ reactions.
* **Resource Management/Leadership:** Allocates activities, directs tasks and manages resources to meet objectives. Provides coaching and on the job training, recognises and supports staff achievements and fosters open communication in the team.
* **Judgement and Problem Solving:** Investigates underlying issues of complex and ill-defined problems and develops appropriate responses by adapting/creating and testing alternative solutions.
* **Independence:** Plans, sets and works to meet challenging standards and goals for self and/or others. Recognises where endeavours will make the most impact or difference, decides on desired outcome and sets realistic goals to reach this target.
* **Adaptability:**Copes with ambiguity or situations that lack clarity. Adapts readily to changing circumstances and new responsibilities (which may include activities outside own preferences) in the interests of achieving team objectives. Recognises the need for and undertakes personal development as a result of change.

Special Requirements

Appointment to this role is subject to provision of a pre-employment background check and may be subject to other security/medical/character clearance requirements.

* The successful candidate will undertake a pre-employment background check. Please note that individuals with criminal records are not automatically deemed ineligible. Each application will be considered on its merits.

## **About CSIRO**

We solve the greatest challenges through innovative science and technology. Visit [CSIRO Online](http://www.csiro.au/) and CSIRO [Energy](https://www.csiro.au/en/Research/EF) for more information.

CSIRO is a values-based organisation.  In your application and at interview you will need to demonstrate behaviours aligned to our values of:

* People First
* Further Together
* Making it Real
* Trusted